

NO REINCARNATION WITHOUT PERMISSION

In a move that would be comical if it were not so serious, the Chinese Communist Party (CCP) is bringing in new rules from 1 September, apparently to "completely control" Buddhism in Tibet. The new rules state that "Lamas are no longer allowed to reincarnate without first obtaining permission from the communist authorities".

Such permission might be hard to obtain from an official in advance, and no doubt what the rules really mean is that all state recognition of a particular incarnation can only be obtained from the Communist Party.

Obviously the CCP wishes to appoint its own to every position of authority within Tibetan Buddhism, as it has tried to do in the case of the current Panchen Lama, who was abducted 12 years ago at the age of six and has not been heard from since.

The Communist Party has already announced that it will select the new Dalai Lama from inside Tibet. However, His Holiness has stated on many occasions that in his next incarnation he will be born outside Tibet, in a free country—unless an acceptable resolution to the Tibet issue has been agreed.

(Source: *Tibet Custom*, 3 August 2007, <http://www.tibetcustom.com/article.php/20070803133532961>)



KEY LOCKERBIE EVIDENCE WAS "TAMPERED WITH"

The key piece of material evidence used by prosecutors to implicate Libya in the Lockerbie bombing has emerged as a probable fake.

Nearly two decades after Pan Am flight 103 exploded over Scotland on 21 December 1988, allegations of international political intrigue and shoddy investigative work are being levelled at the British government, the American FBI and the Scottish police as one of the crucial witnesses, Swiss engineer Ulrich Lumpert, apparently confessed at the end of August that he had lied about the origins of a

crucial "timer"—evidence that helped tie the man convicted of the bombing to the crime.

Former Libyan agent Abdulbaset al-Megrahi is currently serving his sentence in Greenock prison, but later this month [September] the Scottish Court of Appeal is expected to hear Megrahi's case, after the Scottish Criminal Cases Review Commission ruled in June that there was enough evidence to suggest a miscarriage of justice.

The Zurich-based Swiss businessman Edwin Bollier, who has spent nearly two decades trying to clear his company's name, is as eager for the appeal as is Megrahi. Bollier's now bankrupt company, Mebo, manufactured the timer switch

that prosecutors used to implicate Libya after they said that fragments of it had been found on a Scottish hillside.

Bollier, now 70, admits having done business with Libya. "Two years before Lockerbie, we sold 20 MST-13 timers to the Libyan military. FBI agents and the Scottish investigators said one of those timers had been used to detonate the bomb. We were shown a fuzzy photograph and I confirmed the fragments looked as though they came from one of our timers."

However, Bollier was uneasy with the photograph he had been shown and asked to see the fragments. He was finally given permission in 1998 and travelled to Dumfries to see the evidence.

"I was shown fragments of a brown circuit board which matched our prototype. But when the MST-13 went into production, the timers contained green boards. I knew that the timers sold to Libya had green boards. I told the investigators this."

In 2001, Bollier spent five days in the witness box at the Lockerbie trial at Camp Zeist in the Netherlands. "I was a defence witness, but the trial was so skewed to prove Libyan involvement that the details of what I had to say [were] ignored. A photograph of the fragments was produced in court and I asked to see the pieces again. When they were brought to me, they were practically carbonised. They had been tampered with since I had seen them in Dumfries."

(Source: *The Observer*, UK, 2 September 2007, <http://tinyurl.com/3ds38n>)



MICROCHIP IMPLANTS CAUSE CANCER IN LAB ANIMALS

Associated Press will issue a story this weekend [8–9 September] revealing that microchip implants have induced cancer in laboratory animals and dogs, says privacy expert and long-time VeriChip opponent Dr Katherine Albrecht.

According to findings from a series of research articles spanning more than a decade, mice and rats injected with glass-encapsulated RFID transponders developed malignant, fast-growing, lethal cancers in up to 10 per cent of cases. The tumours originated in the tissue surrounding the microchips and often grew to surround the devices completely, the researchers said.

Albrecht first became aware of the microchip–cancer link when she and her *SpyChips* co-author, Liz McIntyre, were contacted by a pet owner whose dog had died from a chip-induced tumour. Albrecht then found medical studies showing a causal link between microchip implants and cancer in other animals. Before she brought the research to the AP's attention, the studies had somehow escaped public notice.

A four-month AP investigation turned up additional documents, several of which had been published before VeriChip's parent company, Applied Digital Solutions, sought FDA approval to market the implant for humans. The VeriChip received FDA approval in 2004 under the watch of then Health and Human Services Secretary Tommy Thompson, who later joined the company's board.

Under FDA policy, it would have been VeriChip's responsibility to bring the adverse studies to the FDA's attention, but VeriChip CEO Scott Silverman claims the company was unaware of the research.

Albrecht expressed scepticism that a company like VeriChip, whose primary business is microchip implants, would be unaware of relevant studies in the published literature.

"For Mr Silverman not to know about this research would be negligent. If he did know about these studies, he certainly had an incentive to keep them quiet," said Albrecht. "Had the FDA known about the cancer link, they might never have approved his company's product."

Since gaining FDA approval, VeriChip has aggressively targeted diabetes and dementia patients, and recently announced that it had chipped 90 Alzheimer's patients

and their caregivers in Florida. Employees in the Mexican Attorney General's Office, workers in a US security firm and club-goers in Europe have also been implanted.

Albrecht expressed concern for those who have received a chip implant, urging them to get the devices removed as soon as possible. "These new revelations change everything," she said. "Why would anyone take the risk of having a cancer chip in their arm?"

(Source: Katherine Albrecht, *SpyChips.com*, 7 September 2007; see also Miami Herald, 8 Sept 2007, <http://www.miamiherald.com/775/story/230244.html>)

DOCTORS DISMISS PATIENTS' DRUG SIDE EFFECTS

A new study has revealed that when patients feel they might be having an adverse effect from a prescribed drug, doctors will very often dismiss their concerns. Dr Beatrice A. Golomb of the University of California at San Diego and her colleagues found in their survey of 650 patients taking cholesterol-lowering statin drugs, who reported having adverse drug reactions, that many said their physicians denied that the drugs could be connected to their symptoms.

"Physicians seem to commonly dismiss the possibility of a connection," Golomb told Reuters Health. "This seems to occur even for the best-supported adverse effects of the most widely prescribed class of drugs... Clearly there is a need for better physician education about adverse effects, and there is a strong need for patient involvement in adverse event reporting."

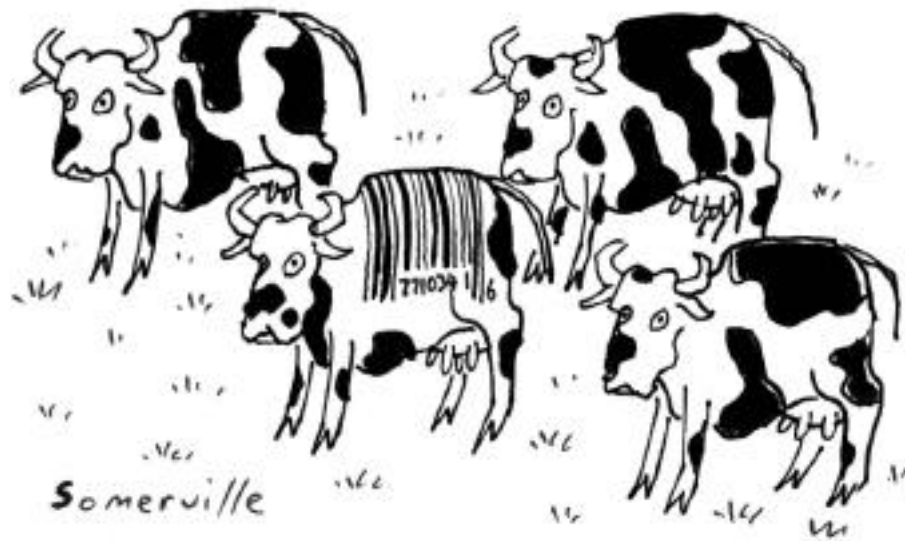
The best-known side effects of statins, which include widely prescribed drugs such as Lipitor® and Zocor®, are liver damage and muscle problems, although statins have also been tied to changes in memory, concentration and mood, among other problems. Physician reaction to a potential side effect is crucial because the muscle problems can progress to a rare but potentially fatal condition called rhabdomyolysis if the drug isn't discontinued.

The researchers investigated the responses of doctors to statin-prescribed patients who believed they were having adverse drug reactions. In the great majority of cases, the patient, not the doctor, initiated the discussion.

The investigators were "surprised" at how frequently patients reported that their doctors dismissed their concerns, Golomb said. While her study wasn't designed to find out why, the researcher notes that while the pharmaceutical industry is sure to get the word out about a drug's benefits there is "really no corresponding interest group to make sure that physicians learn about adverse effects".

Patients should be aware of the potential adverse effects of any medication they're taking, she said. And those who find their doctors dismiss their concerns should probably look elsewhere for medical care, she added. "In general, patients should always have physicians that they feel are hearing them."

(Source: Reuters, 28 August 2007, <http://www.msnbc.msn.com/id/20479490/>)



THE RHYTHM OF THE SUN

Scientists from the *Ulysses* mission have proven that sounds generated deep inside the Sun cause the Earth to shake and vibrate in sympathy. They have found that Earth's magnetic field, atmosphere and terrestrial systems all take part in this cosmic sing-along.

David Thomson and Louis Lanzerotti, team members of the HISCALE experiment on board *Ulysses*, together with colleagues Frank Vernon, Marc Lessard and Lindsay Smith, present evidence that proves that the Earth moves to the rhythm of the Sun. They show that distinct, isolated tones, predicted to be generated by pressure and gravity waves in the Sun, are present in a wide variety of terrestrial systems.

Using highly sophisticated statistical techniques, Thomson and colleagues have discovered these same distinct tones emitted by the Sun in seismic data here on Earth. They have also found that Earth's magnetic field and atmosphere, and even voltages induced on ocean cables, are all participating in this cosmic sing-song.

Although these tones are all around us, it would not be possible for us to hear them, even if we listened very closely. Their pitch is too low for the human ear, typically 100–5,000 microhertz (one microhertz corresponds to one vibration every 278 hours). This is more than 12 octaves below the lowest note audible to humans. For comparison, the note to which orchestras tune their instruments (A above middle C on a piano) corresponds to 440 hertz.

(Source: European Space Agency, 17 August 2007, <http://tinyurl.com/2cyu8y>)

PLANT GENES SWITCHED ON BY SOUND WAVES

Mi-Jeong Jeong of the National Institute of Agricultural Biotechnology in Suwon, South Korea, and colleagues claim to have identified two genes in rice that respond to sound waves. They also say that the promoter of one of the sound-sensitive genes could be attached to other genes to make them respond to sound, too.

The findings follow a host of similar, but unsubstantiated, claims that plants respond to sound. If the researchers are correct, they say their discovery could enable farmers to switch specific crop genes on and off, such as ones for flowering, by blasting sound into the fields. That might be cheaper and more environmentally friendly than proposed techniques such as activating genes with chemicals.

The researchers discovered the sound-responsive genes by exposing rice plants to noise while monitoring levels of gene activity. They only found differences, however, when they played the plants sounds at specific frequencies.

The genes *rbcS* and *ALD* became more active at 125 and 250 hertz and less active at 50 hertz. As both genes are known to respond to light, the researchers repeated the tests in the dark and found that the two genes still responded to sound.

"These results suggest that sound could be an alternative to light as a gene regulator," the researchers report in the journal *Molecular Breeding* (DOI: 10.1007/s11032-007-9122-x).

(Source: New Scientist, 30 August 2007, <http://www.newscientist.com>)

\$30 BILLION SPENT ON DRUG ADS IN USA

Drug ads are increasingly taking up a bigger portion of drug companies' advertising budgets, according to a study published in the *New England Journal of Medicine*. The researchers compared US drug companies' 1996 and 2005 spending for direct-to-consumer drug ads shown on TV and websites, played on radio stations and placed in magazines and newspapers.

The study shows that in 2005, drug companies spent 330 per cent more on direct-to-consumer drug ads than in 1996. Even so, they still spend more promoting drugs directly to health care professionals, according to the study. Overall, drug companies spent US\$29.9 billion in 2005 to promote their drug products, compared to \$11.4 billion in 1996.

"Although during that time spending on direct-to-consumer advertising increased by 330%, it made up only 14% of total promotional expenditures in 2005," writes Dr Julie Donohue, from the University of Pittsburgh, and her team.

(Source: New England Journal of Medicine, vol. 357, pp. 673-681, 16 August 2007; via *WebMD Medical News*, 23 August 2007)

VAST ANCIENT SETTLEMENT UNEARTHED IN CAMBODIA

It is the sort of archaeological bonanza that comes along once in a lifetime. A new map, based on aerial photographs and radar data of some 3,000 square kilometres around the Angkor Wat temple complex in Cambodia, has revealed 168 newly identified temple sites, 94 of which have now been confirmed in the field. Ponds, roads and canals also show up in unprecedented detail.

Damian Evans of the Greater Angkor Project at the University of Sydney, Australia, and colleagues in Australia, Cambodia and France, mapped the entire catchment area of the Angkor region's rivers. They found that about two-thirds of this now densely vegetated region was once occupied, making it by far the biggest pre-industrial settlement ever documented.

Angkor's main period of occupation was from the ninth to the 16th century, when the settlement collapsed and the jungle took over. The main theory for the collapse is the failure of an extensive water management system. Environmental damage caused by the system may have made it unsustainable, leading to food shortages. The map includes detail of



apparent failures of the canal system, with multiple barrages and dykes at some sites.

"There is massive redundancy in the canal network," says Evans.

(Source: *New Scientist*, 18 August 2007)

CYBERWARFARE HITS UK, USA

Chinese hackers, some believed to be from the People's Liberation Army, have been attacking the computer networks of UK government departments.

The attackers have hit the network at the Foreign Office as well as those in other key departments, according to Whitehall officials. An incident last year that shut down part of the House of Commons computer system, initially believed to be caused by an individual, was discovered to be the work of an organised Chinese hacking group, officials said.

Security and defence officials are coy about what they know of specific attacks. However, they say several Whitehall departments have fallen victim to China's cyberwarriors. One expert described it as a "constant ongoing problem".

The disclosures came after reports that the Chinese military had hacked into a Pentagon military computer network in June. The *Financial Times* said American officials called it the most successful cyberattack on the US defence department.

Defence department officials confirmed that there had been a "detected penetration" of elements of the email system used by the network serving the office of Robert Gates, the US defence secretary. US officials were reported to have said that an investigation had discovered that the People's Liberation Army (PLA) was responsible.

The US gave the codename *Titan Rain* to the growing number of Chinese attacks, notably directed at the Pentagon but also hitting other US government departments, over the past few years.

Angela Merkel, Germany's chancellor, is reported to have raised the issue of Chinese attacks on her government's computers during a visit to Beijing. Officials here declined to say whether the British government had raised the issue with the Chinese authorities.

Alex Neill, China expert and head of the Asia Security Programme at the Royal United Services Institute (RUSI), said cyberattacks by the Chinese had been going on for at least four years. He described the reported attack on the Pentagon as the "most flagrant and brazen to date".

(Source: *The Guardian*, 5 September 2007)

MILITARISATION OF MEDICINE: DANGEROUS PRESCRIPTIONS

The British Medical Association (BMA) recently issued a new report on tactical pharmacology, "The Use of Drugs as Weapons", the third of its publications warning about the militarisation of medicine and its potential for new forms of warfare.

This has been an issue for at least 40 years, but the research has accelerated since 9/11, which increased the resources available to study technologies needed to fight "asymmetrical" conflicts in which friend and foe might be intermingled or indistinguishable.

At the same time, the continuing revolution in neuroscience is opening new perspectives. Molecules can now be re-engineered to target bioregulation processes, including neurological functions and cardiovascular processes. In the past, this was a laborious experimental process; now it can be computerised so that the most promising bioactive agents and their properties can be identified quickly.

No one would deny these facilities to the pharmaceutical and medical industries, but this raises the threat of biomechanisms that can be used for repression, torture and terror.

We could also see troops going into action with chemically heightened aggression as well as resistance to fear, pain and fatigue. It is not science fiction to suggest that we might see military pharmacology that can remove feelings of guilt or post-traumatic stress. The economic temptation is strong: five times more soldiers suffer mental than physical wounds in war.

The British Medical Association's report notes these prospects and warns that despite the prohibitions on biological and chemical weapons, governments are "demonstrating considerable interest in the possibility of using drugs as weapons". Part of the push has come from the desire for non-lethal weapons.

In 1999, a European Parliament committee called for a global ban on all research and development "which seeks to apply knowledge of the chemical, electrical, sound vibration or other functioning of the human brain to the development of weapons which might enable any form of manipulation of human beings". But since 9/11, there has been less political pressure for accountability from the state security agencies.

For the medical association, the military use of drugs raises major ethical issues because "the agent whereby people could be incapacitated without risk of death in a tactical situation does not exist and is unlikely to in the foreseeable future".

The association's report also warns that military research could lower medical standards for testing drugs on humans.

What would happen if some country decided that pharmaceutical weapons do not require clinical trials? Or could a medical ethics committee agree to tests on the old, sick or young? Or could this kind of research be outsourced to a country where money and political capital are more important than ethics?

If hazardous biochemical weapons for counterterrorist or counterinsurgency operations came to be routinely used, we could anticipate a rapid evolution of variants with immobilising and pain-inducing effects.

Weapons are also being designed to carry drugs to targets: flight-stabilised syringes, mortar bombs for dispersing chemical agents, modified paint-ball guns, micro-encapsulated pellets which release an agent when stepped on, and unmanned vehicles.

The BMA rightly emphasises legal concerns because they undermine the international legal norms that protect humanity from poison and the deliberate spread of disease—norms which have been put in place by decades of negotiation.

Using existing drugs as weapons means moving towards a slippery slope, at the bottom of which is militarised biology. This could include intentional manipulation of emotions, memories, immune response or even fertility.

The common view is that all chemical and biological weapons are banned by international conventions. Unfortunately the Chemical Weapons Convention allows an exemption for domestic law enforcement, including riot control. The convention does not permit the use of riot agents for waging war. However, law enforcement has not been defined, and the role of incapacitating agents as anti-terror weapons has opened a significant loophole. Arms controllers meeting in the Hague next year to review the convention would do well to heed the BMA's warnings.

(Source: by Steve Wright, *International Herald Tribune*, 29 August 2007, <http://www.iht.com/articles/2007/08/29/opinion/edwright.php>. Steve Wright is professor at the School of Applied Global Ethics, Leeds Metropolitan University, UK.)